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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,867	03/16/2004	Masayuki Takenaka	118363	1563

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/800,867	Applicant(s) TAKENAKA ET AL.	
	Examiner Nguyen N. Hanh	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendments filed on 6/22/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 18, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchida et al.

Regarding claim 1, Uchida et al. disclose a drive system, comprising: a plurality of electric power devices (motor and generator in Fig. 1); a drive case having a plurality of case segments (Fig. 6) which are connected to each other at mating surfaces thereof, each of the electric power devices being respectively contained in one of the case segments such that one of the electric power devices is contained in one of the case segments and another one of the electric power devices is contained in another one of the case segments (Fig. 6); and a plurality of inverters (Col. 7, lines 59-67), one for each of the electric power devices, wherein the inverters are collectively attached to one of the case segments (U1 as shown in Fig. 5), and a flow path of a coolant for cooling the

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inverters is positioned between the one of the case segments and the inverters, wherein each one of the electric power devices defines a motor having a stator and each of the stators of the motors are fixed to the corresponding case segments (Figs. 5 and 6).

Regarding claim 18, Uchida et al. disclose a drive system wherein the inverters are fixed on a common base (heat sink 51 in Fig. 5) which is attached to one of the case segments and the flow path of the coolant is positioned between the one of the case segments and the base.

Regarding claim 23, Uchida et al. disclose a drive system wherein the inverters are arranged perpendicularly to a main shaft of the drive system (Fig. 5).

Regarding claim 24, Uchida et al. disclose a drive system wherein the inverters are arranged along a main shaft of the drive system (as shown in Fig. 5, the length of the box U1 is arranged parallel to the shaft).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 15-22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. in view of Hara et al (US 6,323,613).

Regarding claim 2, Uchida et al. show all limitations of the claimed invention except showing a drive system wherein the inverters are contained in a common

inverter case which is attached to the drive case and the flow path of the coolant is positioned between the one of the case segments and the inverter case.

However, Hara et al. disclose a drive system wherein the inverters are contained in a common inverter case (11 in Figs. 7 and 9) which is attached to the drive case and the flow path of the coolant is positioned between the one of the case segments and the inverter case (Fig. 6) for the purpose of simplifying the cooling structure of the drive unit.

Since Uchida et al. and Hara et al. are in the same field of endeavor, the purpose disclosed by Hara et al. would have been recognized in the pertinent art of Uchida et al.

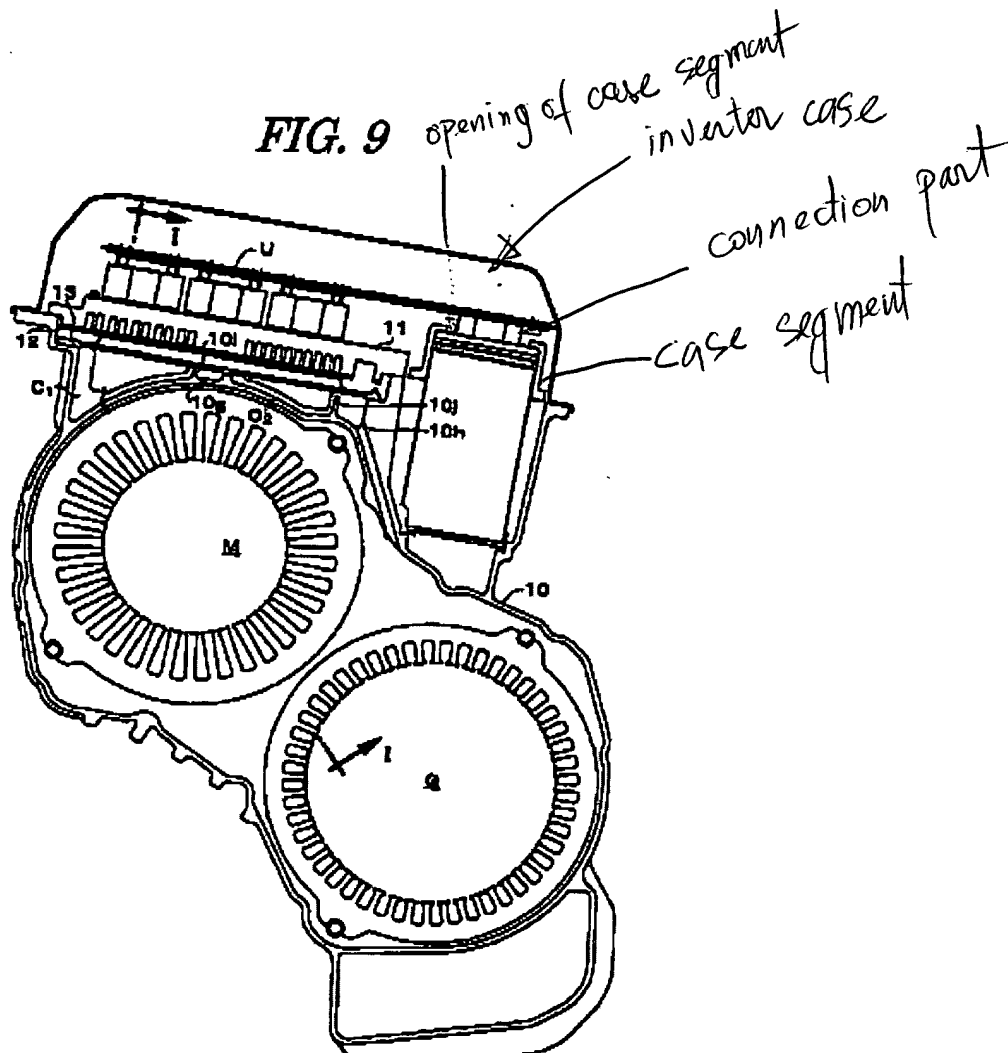
It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Uchida et al. by forming a drive system wherein the inverters are contained in a common inverter case which is attached to the drive case and the flow path of the coolant is positioned between the one of the case segments and the inverter case as taught by Hara et al. for the purpose of simplifying the cooling structure of the drive unit.

Regarding claims 15, 19 and 20, Hara et al. disclose a drive system wherein the electric power devices are connected to the respective inverters with connection parts (please see markups below) which extend out from the corresponding case segments.

Regarding claims 21 and 16, Hara et al. disclose a drive system wherein each of the connection parts has a terminal which extends through the corresponding case segment and which projects into the inverter case (Fig. 9).

Regarding claims 17 and 22, Hara et al. disclose a drive system wherein each of the terminals is positioned near an opening of the corresponding case segment.

Regarding claim 25, Hara et al. disclose a drive system wherein the mating surface between one of the case segments and the common inverter case is a substantially rectangular frame with round corners (Fig. 7).



4. Claims 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. in view of Hara et al. and further in view of Tsuruhara.

Regarding claims 3 and 11, Uchida et al. and Hara et al. disclose the invention except for showing two (or a plurality as in claim 11) sealing members are provided, one

interposed between the one of the case segments (10') and the inverter case and the other between the drive case (10) and the inverter case.

However, Tsuruhara discloses a motor structure wherein a sealing members (12 and 13 in Fig. 1) is provided between the two casing part for the purpose of preventing coolant leaking (col. 4, lines 45-50).

Since Uchida et al., Hara et al. and Tsuruhara are in the same field of endeavor, the purpose disclosed by Tsuruhara would have been recognized in the pertinent art of Uchida et al. and Hara et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Uchida et al. and Hara et al. by providing two (or a plurality as in claim 11) sealing members, one interposed between the one of the case segments (10') and the inverter case and the other between the drive case (10) and the inverter case as taught by Tsuruhara for the purpose of preventing coolant leaking.

Regarding claim 4, Hara et al. show the drive system wherein a step is interposed between the drive case (10 in Fig. 7) and the inverter case (10'). Therefore, the combination Uchida et al., Hara et al. and Tsuruhara show the sealing member interposed between the drive case and the inverter case tolerates a step between the case segments.

Regarding claims 5, 8 and 12, Hara et al. disclose a drive system wherein the electric power devices are connected to the respective inverters with connection parts which extend out from the corresponding case segments (refer to claim 5).

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Regarding claims 6, 9 and 13, Hara et al. disclose a drive system wherein each of the connection parts has a terminal which extends through the corresponding case segment and which projects into the inverter case (refer to claim 6).

Regarding claims 7, 10 and 14, Hara et al. disclose a drive system wherein each of the terminals is positioned near an opening of the corresponding case segment (refer to claim 7).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information on How to Contact USPTO

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

August 25, 2006



KARL TAMAI
PRIMARY EXAMINER